**3GPP TSG-CT WG3 Meeting #142 *C3-253608***

**Gothenburg, SE, 25 - 29 August 2025 (Revision of C3-253100)**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** | **0953** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** |  | | | | | | | | | |
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| ***Source to WG:*** | , CATT | | | | | | | | | |
| ***Source to TSG:*** | C3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | , XRM | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | As perTS 23.503 clause 6.1.3.22,  *- When the AF requests the network to provide QoS with individual QoS parameters, one or more Requested Alternative QoS Parameter Set(s) in a prioritized order. Each Requested Alternative QoS Parameter Set is comprised of the following individual parameters: Requested 5GS Delay, Requested Guaranteed Flow Bitrate , Requested Packet Error Rate and optionally, a* ***Requested Averaging Window****. Each requested Alternative QoS Parameter Set may also include a* ***Maximum Burst Size*** *parameter.*  The averaging window and the maximum burst size for alternative QoS parameters has to be added  As per C3-252615 in TS 29.122, EnPDUSetHandling feature name is updated as ExtQoS\_v2. The corresponding changes needs to be updated fully. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update Note with The averaging window and the maximum burst size in alternative QoS parameters.  EnPDUSetHandling is updated as ExtQoS\_v2 | | | | | | | | |
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| ***Consequences if not approved:*** | | The stage 3 is not inline with stage 2 requirements.  The non-existing EnPDUSetHandling feature names service description is elaborated in this specification. | | | | | | | | |
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| ***Clauses affected:*** | | 5.14.2.1.13, 5.14.2.1.14 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR does not impact the OpenAPI descriptions defined in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First Change \* \* \* \*

##### 5.14.2.1.13 Type AsSessionMediaComponent

This type represents media component data for a single-modal data flow of a multi-modal service. It shall comply with the provisions defined in table 5.14.2.1.13-1.

Table 5.14.2.1.13-1: Definition of type AsSessionMediaComponent

| Attribute name | Data type | Cardinality | Description | Applicability |
| --- | --- | --- | --- | --- |
| flowInfos | array(FlowInfo) | 0..N | Contains the IP data flow(s) description for a single-modal data flow. |  |
| qosReference | string | 0..1 | Identifies a pre-defined QoS information. |  |
| altSerReqs | array(string) | 0..N | Ordered list of alternative service requirements that include a set of QoS references. The lower the index of the array for a given entry, the higher the priority.(NOTE 3) |  |
| altSerReqsData | array(AlternativeServiceRequirementsData) | 0..N | Ordered list of alternative service requirements that include individual QoS parameter sets. The lower the index of the array for a given entry, the higher the priority. (NOTE 3) (NOTE 5) |  |
| disUeNotif | boolean | 0..1 | Indicates to disable QoS flow parameters signalling to the UE when the SMF is notified by the NG-RAN of changes in the fulfilled QoS situation when it is included and set to "true". The fulfilled situation is either the QoS profile or an Alternative QoS Profile. The default value "false" shall apply, if the attribute is not present and has not been supplied previously. |  |
| medCompN | integer | 1 | Identifies the media component number, and it contains the ordinal number of the media component. |  |
| medType | MediaType | 0..1 | Indicates the media type of the service. |  |
| marBwUl | BitRate | 0..1 | Maximum requested bandwidth for the Uplink. |  |
| marBwDl | BitRate | 0..1 | Maximum requested bandwidth for the Downlink. |  |
| mirBwUl | BitRate | 0..1 | Minimum requested bandwidth for the Uplink. |  |
| mirBwDl | BitRate | 0..1 | Minimum requested bandwidth for the Downlink. |  |
| rTLatencyInd | boolean | 0..1 | Indicates the service data flow needs to meet the Round-Trip (RT) latency requirement of the service, when it is included and set to "true".  The default value is "false" if omitted.  (NOTE 4) | RTLatency |
| pdb | PacketDelBudget | 0..1 | Indicates an upper bound for the time that a packet may be delayed between the UE and the PSA UPF. | RTLatency |
| rTLatencyIndCorreId | RttFlowReference | 0..1 | Identifies which Media Components contribute to the RT Latency requirement for two service data flows.  (NOTE 4) | RTLatency |
| pduSetQosDl | PduSetQosPara | 0..1 | Contains the PDU Set QoS parameter(s) which are used to support PDU Set based QoS handling in the downlink. | PDUSetHandling |
| pduSetQosUl | PduSetQosPara | 0..1 | Contains the PDU Set QoS Parameter(s) which are used to support PDU Set based QoS handling in the uplink. | PDUSetHandling |
| l4sInd | UplinkDownlinkSupport | 0..1 | Provides L4S support information.  (NOTE 2) | L4S |
| protoDescUl | ProtocolDescription | 0..1 | Uplink Protocol description for PDU Set identification in UE. | PDUSetHandling |
| protoDescDl | ProtocolDescription | 0..1 | Downlink Protocol description for PDU Set identification, the detection of end of Data burst indication, the detection of the Data Burst Size marking indication, TTNB indication indication of whether MoQ or UDP-option is used to carry media related information. | PDUSetHandling  PowerSaving  TrafficCharChange  OnPathN6MediaInfo |
| periodUl | DurationMilliSec | 0..1 | Indicates the time period between the start of the two data bursts in units of milliseconds in Uplink direction. | PowerSaving |
| periodDl | DurationMilliSec | 0..1 | Indicates the time period between the start of the two data bursts in units of milliseconds in Downlink direction. | PowerSaving |
| evSubsc | EventsSubscReqData | 0..1 | Identifies the events the application subscribes to at creation of a media component. (NOTE 1) (NOTE 6) | EnQoSMon  L4S |
| datBurstSizeInd | boolean | 0..1 | Indicates the Data Burst Size marking for the DL service data flow is supported, when it is included and set to "true". The default value is "false" if omitted. | TrafficCharChange |
| timetoNextBurstInd | boolean | 0..1 | Indicates the Time to Next Burst for the DL service data flow is supported, when it is included and set to "true". The default value is "false" if omitted. | TrafficCharChange |
| onPathN6SigInfo | OnPathN6SigInfo | 0..1 | Contains the on-path N6 signaling information, when it is present, it indicates supporting setting up On-path N6 connection to deliver media related information. | OnPathN6MediaInfo |
| expTranInd | boolean | 0..1 | Expedited Transfer Indication for the downlink traffic to enable expedited data transfer with reflective QoS for the Non-GBR service data flow.  - "true": the expedited data transfer of larger payload for XR application is enabled for the flow.  - "false": the expedited data transfer of larger payload for XR application is not enabled for the flow.  The default value is "false" if omitted. | TrafficCharChange |
| NOTE 1: If attribute "evSubsc" is present, one or more of the following IEs within EventsSubscReqData data type may be included: "events", "notifUri", "reqQosMonParams", "qosMon", "qosMonDatRate", "pdvReqMonParams", "pdvMon", "congestMon", "notifCorreId", "rttMon", "directNotifInd", "avrgWndw". In addition, when the attribute "events" is present, only the following AfEvent enumeration may be included: "QOS\_MONITORING", "PACK\_DEL\_VAR", "RT\_DELAY\_TWO\_QOS\_FLOWS", "L4S\_SUPP", "QOS\_MON\_CAP\_REPO", "RATE\_LMIT\_INFO\_REPO".  NOTE 2: Within an AsSessionMediaComponent entry, the AF may include either the indication of L4S support within the "l4sInd" attribute or the request for congestion measurements within the "evSubsc" attribute as specified in 3GPP TS 29.514 [52]. The indication of the support of ECN marking for L4S and the request of congestion measurements are mutually exclusive and shall not be present simultaneously.  NOTE 3: The attributes "altSerReqs" and "altSerReqsData" are mutually exclusive. Of the two, only the attribute "altSerReqs" may be provided if the attribute "qosReference" is provided, while only the attribute "altSerReqsData" may be provided if the attribute "qosReference" is not provided.  NOTE 4: The "rTLatencyInd" attribute and the "rTLatencyIndCorreId" attribute are mutually exclusive.  NOTE 5: The "pduSetQosDl", "pduSetQosUl", "averWindow", "maxDataBurstVol" and "extMaxDataBurstVol" attributes within the AlternativeServiceRequirementsData data type may be present only when the "ExtQoS\_v2" feature is supported.  NOTE 6: The events mapping relationship between the subscription and the notification messages is same for all the events except as follows:  - the "L4S\_SUPP" in the subscription corresponds to the "L4S\_AVAILABLE" and "L4S\_NOT\_AVAILABLE" events in the notification.  - the "PACK\_DEL\_VAR" in the subscription corresponds to the "PACK\_DELAY\_VAR" in the notification. | | | | |

If the "EnQoSMon" feature is supported, and the AF includes the attribute "evSubsc" in the "AsSessionMediaComponent" data type with a subscription to a specific event, then the "events" attribute within the "AsSessionWithQoSSubscription" data type shall not include a subscription to notifications for that specific event. In this case, the NEF shall use the value of the "notifUri" attribute included within the "evSubsc" attribute in the "AsSessionMediaComponent" data type as target URI of the HTTP POST request for that specific event notification.

NOTE: The AF can provide different values per AS session media component for the "notifUri" attribute and/or "notifCorreId" attribute, e.g. to identify the media component of a received report.

If the "EnQoSMon" feature is supported, and the AF requires the subscription to Round Trip Delay over two QoS flows, then the NF service consumer shall use:

- if the UL and DL flows request the same QoS and the same subscription events, an entry of the "AsSessionMediaComponent" data type and shall include the "evSubsc" attribute with the subscription to Round-Trip delay measurements over two SDFs as described in 3GPP TS 29.514 [52];

- otherwise, an entry of the AsSessionMediaComponent data type for the service data flows that require the measurement of the delay in the UL direction and another entry of the AsSessionMediaComponent for the service data flows that require the measurement of the delay in the DL direction. Each AsSessionMediaComponent entry shall include the "evSubsc" attribute with the subscription to Round-Trip delay measurements over two SDFs and may include the "rttFlowRef" attribute with the shared key for the UL and DL monitored flows and, if needed, an indication of whether the monitored flow direction is the UL or the DL as described in 3GPP TS 29.514 [52].

\* \* \* \* Next changes \* \* \* \*

##### 5.14.2.1.14 Type AsSessionMediaComponentRm

This type represents the AsSessionMediaComponent with the "nullable: true" property. The individual properties of the AsSessionMediaComponentRm data type are also removable. It shall comply with the provisions defined in table 5.14.2.1.14-1.

Table 5.14.2.1.14-1: Definition of type AsSessionMediaComponentRm

| Attribute name | Data type | Cardinality | Description | Applicability |
| --- | --- | --- | --- | --- |
| flowInfos | array(FlowInfo) | 0..N | Contains the IP data flow(s) description for a single-modal data flow. |  |
| qosReference | string | 0..1 | Identifies a pre-defined QoS information. |  |
| altSerReqs | array(string) | 0..N | Ordered list of alternative service requirements that include a set of QoS references. The lower the index of the array for a given entry, the higher the priority.(NOTE 3) |  |
| altSerReqsData | array(AlternativeServiceRequirementsData) | 0..N | Ordered list of alternative service requirements that include individual QoS parameter sets. The lower the index of the array for a given entry, the higher the priority. (NOTE 3) (NOTE 4) |  |
| disUeNotif | boolean | 0..1 | Indicates to disable QoS flow parameters signalling to the UE when the SMF is notified by the NG-RAN of changes in the fulfilled QoS situation when it is included and set to "true". The fulfilled situation is either the QoS profile or an Alternative QoS Profile. |  |
| medCompN | integer | 1 | Identifies the media component number, and it contains the ordinal number of the media component. |  |
| medType | MediaType | 0..1 | Indicates the media type of the service. |  |
| marBwUl | BitRateRm | 0..1 | Maximum requested bandwidth for the Uplink. |  |
| marBwDl | BitRateRm | 0..1 | Maximum requested bandwidth for the Downlink. |  |
| mirBwUl | BitRateRm | 0..1 | Minimum requested bandwidth for the Uplink. |  |
| mirBwDl | BitRateRm | 0..1 | Minimum requested bandwidth for the Downlink. |  |
| rTLatencyInd | boolean | 0..1 | Indicates the service data flow needs to meet the Round-Trip (RT) latency requirement of the service, when it is included and set to "true". | RTLatency |
| pdb | PacketDelBudgetRm | 0..1 | Indicates an upper bound for the time that a packet may be delayed between the UE and the PSA UPF. | RTLatency |
| rTLatencyIndCorreId | RttFlowReferenceRm | 0..1 | Identifies which Media Components contribute to the RT Latency requirement for two service data flows. | RTLatency |
| pduSetQosDl | PduSetQosParaRm | 0..1 | Contains the PDU Set QoS parameter(s) which are used to support PDU Set based QoS handling in the downlink. | PDUSetHandling |
| pduSetQosUl | PduSetQosParaRm | 0..1 | Contains the PDU Set QoS Parameter(s) which are used to support PDU Set based QoS handling in the uplink. | PDUSetHandling |
| l4sInd | UplinkDownlinkSupport | 0..1 | Provides L4S support information.  (NOTE 2) | L4S |
| protoDescUl | ProtocolDescriptionRm | 0..1 | Uplink Protocol description for PDU Set identification in UE. | PDUSetHandling |
| protoDescDl | ProtocolDescriptionRm | 0..1 | Downlink Protocol description for PDU Set identification, and detection of end of Data burst indication, the detection of the Data Burst Size marking indication, TTNB indication indication of whether MoQ or UDP-option is used to carry media related information. | PDUSetHandling  PowerSaving  TrafficCharChange  OnPathN6MediaInfo |
| periodUl | DurationMilliSecRm | 0..1 | Indicates the time period between the start of the two data bursts in units of milliseconds in Uplink direction. | PowerSaving |
| periodDl | DurationMilliSecRm | 0..1 | Indicates the time period between the start of the two data bursts in units of milliseconds in Downlink direction. | PowerSaving |
| evSubsc | EventsSubscReqDataRm | 0..1 | Identifies the events the application subscribes to at creation of a media component. (NOTE 1) (NOTE 5) | EnQoSMon, L4S |
| datBurstSizeInd | boolean | 0..1 | Indicates the Data Burst Size marking for the DL service data flow is supported, when it is included and set to "true". | TrafficCharChange |
| timetoNextBurstInd | boolean | 0..1 | Indicates the Time to Next Burst for the DL service data flow is supported, when it is included and set to "true". | TrafficCharChange |
| onPathN6SigInfo | OnPathN6SigInfo | 0..1 | Contains the on-path N6 signaling information, when it is present, it indicates supporting setting up On-path N6 connection to deliver media related information. | OnPathN6MediaInfo |
| expTranInd | boolean | 0..1 | Expedited Transfer Indication for the downlink traffic to enable expedited data transfer with reflective QoS for the Non-GBR service data flow.  - "true": the expedited data transfer of larger payload for XR application is enabled for the flow.  - "false": the expedited data transfer of larger payload for XR application is not enabled for the flow. | TrafficCharChange |
| NOTE 1: If attribute "evSubsc" is present, one or more of the following IEs within EventsSubscReqDataRm data type may be included: "events", "notifUri", "reqQosMonParams", "qosMon", "qosMonDatRate", "pdvReqMonParams", "pdvMon", "congestMon", "notifCorreId", "rttMon", "directNotifInd", "avrgWndw". In addition, when the attribute "events" is present, only the following AfEvent enumeration may be included: "QOS\_MONITORING", "PACK\_DEL\_VAR", "RT\_DELAY\_TWO\_QOS\_FLOWS", "L4S\_SUPP", "QOS\_MON\_CAP\_REPO", "RATE\_LIMIT\_INFO\_REPO".  NOTE 2: Within an AsSessionMediaComponentRm entry, the AF may include either the indication of L4S support within the "l4sInd" attribute or the request for congestion measurements within the "evSubsc" attribute as specified in 3GPP TS 29.514 [52]. An AsSessionMediaComponent entry within the Individual AS Session with Required QoS Subscription resource shall not contain simultaneously both, the indication of L4S support and the subscription to congestion monitoring.  NOTE 3: The attributes "altSerReqs" and "altSerReqsData" are mutually exclusive. Of the two, only the attribute "altSerReqs" may be provided if the attribute "qosReference" is provided or has been provided before, while only the attribute "altSerReqsData" may be provided if the attribute "qosReference" is not provided or hasn’t been provided before.  NOTE 4: The "pduSetQosDl", "pduSetQosUl", "averWindow", "maxDataBurstVol" and "extMaxDataBurstVol" attributes within the AlternativeServiceRequirementsData data type may be present only when the "ExtQoS\_v2" feature is supported.  NOTE 5: The events mapping relationship between the subscription and the notification messages is same for all the events except as follows:  - the "L4S\_SUPP" in the subscription corresponds to the "L4S\_AVAILABLE" and "L4S\_NOT\_AVAILABLE" events in the notification.  - the "PACK\_DEL\_VAR" in the subscription corresponds to the "PACK\_DELAY\_VAR" in the notification. | | | | |

If the "EnQoSMon" feature is supported, and the AF includes the attribute "evSubsc" in the "AsSessionMediaComponentRm" data type with a subscription to a specific event, then the "events" attribute within the Individual AS Session with Required QoS Subscription resource shall not include a subscription to notifications for that specific event. In this case, the NEF shall use the value of the "notifUri" attribute included within the "evSubsc" attribute in the "AsSessionMediaComponentRm" data type as target URI of the HTTP POST request for that specific event notification.

NOTE: The AF can provide different values per AS session media component for the "notifUri" attribute and/or "notifCorreId" attribute, e.g. to identify the media component of a received report.

If the "EnQoSMon" feature is supported, and the AF requires the subscription to Round Trip Delay over two QoS flows, then the NF service consumer shall behave as specified in clause 5.14.2.1.3.

\* \* \* \* End of Changes \* \* \* \*